

# **ATTACHMENT I**

*Charles Parekh, Ph.D.  
Director  
Duff & Phelps*

## PROFESSIONAL CREDENTIALS

*Charles Parekh is a Director at Duff & Phelps specializing in the application of economic and statistical analysis to damages, finance, and public finance issues. He has over fourteen years of experience working in dispute consulting and litigation support. His experience includes work in the securities, technology, and educational industries.*

### *Professional Experience*

- Dr. Parekh has led dozens of matters involving the use of statistical and economic modeling in order to calculate damages and losses. He led the statistical modeling teams in multiple engagements employing sampling to estimate repurchase liabilities in multiple mortgage-backed securities litigations and bankruptcies. In addition, his statistical experience includes the sampling of transactions to detect price fixing, the use of regression techniques in internal investigations, and the use of surveys and regressions in order to value intellectual property.
- He has an extensive background in economic and policy analysis including an assessment of the economic efficiency of electronic waste recycling, an analysis of damages from cigarette smoking, an examination of school efficiency and test score performance in New York City Public Schools, a study of school organization and educational outcomes, an evaluation of EPA clean air regulations, and an assessment of U.S. Postal Service pricing strategies.
- Dr. Parekh served as an expert to the Trustees in the Lehman Brothers bankruptcy and provided expert testimony on the statistical need to randomly test students for drugs and alcohol. He also served on the team that investigated a whistle-blower complaint alleging the University of Illinois College of Law inflated admissions data, including LSATs and GPAs of incoming classes. He has also led multiple consulting engagements assisting law schools in reporting their graduate employment statistics.

### **SELECTED CONSULTING EXPERIENCE:**

#### **RMBS Financial Advisory**

Project leader of team that performed financial analysis and advisory for the Trustee of a pool of RMBS trusts. Work included sampling and statistical analysis of the mortgage pools, as well as the determination of breaches of representations and warranties of the trust governing agreements.

#### **Lehman Brothers RMBS Bankruptcy**

Project leader of team that advised the Trustees of a pool of RMBS trusts throughout the bankruptcy process. Work involved evaluating a sample of loans from several hundred trusts that was selected by the third-party firm and determining the value of the sample for the Trustees' needs. In addition, provided an estimation of claims arising from breaches of representations and warranties.

#### **Residential Capital RMBS Bankruptcy**

Led the statistical and economic analysis team tasked with advising the Trustees of a multi-billion dollar pool of RMBS trusts. Work involved statistical sampling of millions of mortgages from nearly hundreds of trusts in order to determine the number and value of repurchase requests due to breaches of trust representations and warranties. Additionally, primarily responsible for managing, preparing, and drafting expert testimony on the statistical analysis performed.

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***Professional  
Experience  
(continued)***

**Need for Random Drug Testing, Loyalsock, PA, School District**

Testified in court and submitted a written expert report covering the statistical need to drug test middle and high school students. Analyses included a statistical review of the school district's drug and alcohol incident data and an analysis of the surveys and methodologies used by the school district to justify random testing.

**Statistical Fraud Detection**

Served as expert consultant for a large options exchange to assist them in the development of a protocol for reviewing and analyzing the Exchange's trading and regulatory data. This protocol assists the exchange in regulatory and enforcement actions and covered methods to monitor, detect, and prosecute violations of Regulation SHO, which aims to prevent unethical traders from engaging in illegal naked short selling practices.

**Healthcare False Claims Act**

Served as statistical and calculation expert for a healthcare provider accused of submitting false claims for public and private insurance reimbursements. Work included the sampling of hundreds of thousands of invoices for service to determine the level of overpayment and damages associated with overpayments. In addition, the analysis calculated overpayments using multiple forecasting methods.

**University of Illinois College of Law Investigation**

Served as co-investigator of a whistle-blower complaint alleging the College of Law inflated admissions statistics, including LSATs and GPAs of incoming classes. Also provided recommendations to the College of Law to assist in improving its internal controls and the accuracy of its reporting. Retained in subsequent year to provide a review of the accuracy of externally-reported statistics to the ABA and *US News & World Report*.

**Alzheimer Drug Intellectual Property Litigation, Large Pharmaceutical Manufacturer**

Calculated damages due to an unjust enrichment claim against client. Disputed economic logic of plaintiff's complaint, and calculated revised past and future earnings from a major Alzheimer drug. Work involved a theoretical and statistical analysis of relevant markets, as well as statistical forecasting of future earnings.

**Electronic Waste Recycling Analysis, Consumer Technology Industry Association**

Performed an economic analysis of consumer electronic waste recycling legislation in New York City. Work included an economic assessment of the legislation, including both a technical and a theoretical analysis of its economic efficiency, as well as an analysis of related proposals and counter proposals in order to advise client of the best course of action regarding the legislation.

**Tobacco Damage Calculation, Several Large Tobacco Manufacturers**

Provided economic and strategic consulting to several tobacco manufacturers regarding alleged damages incurred by a group of private and public hospital systems. Assisted clients in disputing the economic logic of claims and provided econometric analysis to support the results.

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***Professional  
Experience  
(continued)***

**Mail Sorting Technology, US Postal Service**

Analyzed and prepared written report on the effects of advances in mail sorting technology on mail volume and revenue to determine if technological improvements in scanning and sorting technology resulted in new financial incentives for small mailers.

**Postal Pricing Strategies, US Postal Service**

Analyzed and prepared written report on several alternative pricing strategies for the Postal Service. These strategies centered on price caps and rate-of-return regulation and were used to justify increases in postal rates.

**Electronic Bill Payment and Processing, US Postal Service**

Analyzed and prepared written report on the effects of electronic bill payment and presentment (EBPP) on First Class mail volumes. Generated long-term forecasts of the adoption rates of EBPP and its effect on mail volumes, confirming that the shift from paper bill payment to electronic bill payment has had a profound impact on the Postal Service. These forecasts were used to justify increases in postal rates.

**Calculation of Damages and Value of Life, USG Corporation**

Used demographic and income data to estimate costs of morbidity and mortality related to asbestos exposure. Estimated damages for several thousand individual litigants claiming damages due to exposure. Created value of life models that matched each plaintiff on a case-by-case basis. Analysis was used in expert testimony to support the structuring of a class action settlement.

**Economic Analysis of Contract Dispute, Comcast Cable Corporation**

Provided economic analysis for Comcast Cable's disputed contract with a large billing vendor. Devised litigation strategy and assisted in writing expert testimony to provide an economic basis for nullification of the contract.

**Economic Analysis of Market Concentration, Dean Foods and Suiza Foods**

Analyzed local market competitiveness for the merger of Dean Foods and Suiza Foods. Used plant location, plant capacities, and shipping routes to demonstrate that Dean and Suiza did not compete for school milk contracts in specific local markets. Devised alternative measures for market concentration where data was incomplete. Analysis was used in expert testimony to support the case for merging under federal antitrust statutes.

**Economic Analysis of Market Substitutes, eBay and PayPal**

Conducted economic research regarding market substitutes for PayPal's payment system. Projected ability of market substitutes to compete with PayPal post-acquisition, ultimately demonstrating that the current level of competition would remain virtually unchanged. Analysis was used in expert testimony to support the case for merging under Federal anti-trust and banking laws.

**Oil and Gas Intellectual Property Litigation, Large Oil and Gas Well Services Provider**

Calculated damages for a large drilling services provider in a dispute and counter suit concerning tools used in the extraction of oil and gas from a well. Analyses included calculation of damages from lost sales, price erosion, and accelerated market entry. Additionally, provided an analysis of reasonable royalties. Provided client with both a Plaintiff and Defendant report.

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***Professional  
Experience  
(continued)***

**Vitamin Price Fixing Litigation, Ralston Purina Corporation**

Analyzed price data to demonstrate that several large companies were guilty of price collusion. Also used economic and econometric methods to estimate damages owed due to price collusion. Analysis was used in expert testimony to support the structuring of a class action settlement.

**IPO and Underwriter Litigation, Several Large Investment Banks**

Performed event study to ascertain if lead underwriters and large brokers were illegally promoting initial public offerings (IPOs). Responsible for determining data sources, assembling data, and conducting analysis of several types of IPO rating schemes used by different underwriters. Analysis was used in expert testimony to support client defense in federal court.

**Analysis of the Cost Impacts of Clean Air Regulation, Houston Chamber of Commerce**

Analyzed the costs and benefits of Clean Air Act compliance for the greater Houston area and assisted in writing the white paper Cleaning Up Houston's Act: An Economic Evaluation of Alternative Strategies. This white paper was used by the Houston Chamber of Commerce to estimate the total economic costs of compliance and to assist them in applying for an extension of the 2007 deadline.

**Antitrust and Competition Analysis of CVS Caremark Merger, Texas Independent Pharmacies**

Consulted for several independent pharmacies in Texas to provide a detailed antitrust and competition analysis of the merger between CVS Pharmacy and Caremark, a large pharmaceutical benefits manager. Advised clients on the likelihood of victory in a potential antitrust litigation against CVS Caremark.

**Gender Discrimination Litigation, Smith-Barney Corporation**

Analyzed hiring, account allocation, and bonus practices of a large brokerage house to evaluate the possibility of gender discrimination. Used econometric analysis to demonstrate that the magnitude of the accusation was not warranted. To respond to the individual cases covered by the legal action, developed different types of analysis for time periods during which certain types of data were not available. Analysis was used in expert testimony to support the structuring of settlement agreements.

**PUBLICATIONS, WORKING PAPERS, AND PRESENTATIONS**

Presenter, "The Use of Statistical Analysis in Valuation" Illinois CPA Society, Business Valuation Conference, Chicago, IL, May 22, 2013

"Price Erosion Damages: The Use of Regression to Estimate Elasticity of Demand." Working Paper, 2013.

Presenter, How Do Boys and Girls Do? New Evidence on the Gender Gap in New York City Public Schools, American Education Finance & Policy Association 36th Annual Conference, Seattle, WA, March 25, 2011.

"Does School Configuration Matter? Sixth Grade Test Score Performance in New York City" (with Leanna Stiefel and Amy Ellen Schwartz). New York University Working Paper, 2011.

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***Professional  
Experience  
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“How Do Boys and Girls Do? New Evidence on the Gender Gap in New York City Public Schools” New York University Working Paper, 2011.

*Three Essays on Grade Configuration, Academic Achievement, and the Gender Gap*, Ph.D. Dissertation, New York University, May 12, 2010.

Presenter, School Configuration and Test Score Performance of Sixth Grade Students in New York City Public Schools, American Education Finance Association 33rd Annual Conference, Denver, CO, April 10, 2008.

Presenter, How Should We Organize Primary Schooling? Grade Span, School Size, and Student Academic Performance: Evidence From New York City, Institute of Education Sciences Research Conference, Washington, DC, June 7, 2007.

Presenter, Gender Differences and Test Score Performance in New York City Public Schools, New York University Wagner Graduate School Research Colloquium, New York, NY, March 18, 2007.

“Is a Higher Salary High Enough?: ATI’s COLA Tells All” ModRN Nurse Careers: Career Guide 2007, Spring 2007, p. 84-104.

Discussant Panel, Neighborhood Economic Development Policy, Association of Public Policy and Management Fall Research Conference, Madison, WI, November 2, 2006.

“Is a Higher Salary High Enough?” ModRN Nurse Careers: Career Guide 2006, Spring 2006, p. 48-67.

**TESTIMONY EXPERIENCE:**

- ***In re: Lehman Brothers Holdings, Inc., et al., Debtors***  
United States Bankruptcy Court  
Southern District of New York  
Case Number 08-13555 (SCC)  
August 21, 2014  
  
Provided expert report related to the sampling of mortgage loans in RMBS trusts.
- ***Brian Fagnano v. Loyalsock Township School District***  
Court of Common Pleas of Lycoming County, Pennsylvania  
Docket Number 11-00908  
March 27, 2012  
  
Testified in Court as to the statistical evidence supporting the random drug testing of high school students in Pennsylvania.
- ***Brian Fagnano v. Loyalsock Township School District***  
Court of Common Pleas of Lycoming County, Pennsylvania  
Docket Number 11-00908  
April 11, 2013  
  
Testified in Court as to the statistical evidence supporting the random drug testing of high school students in Pennsylvania.

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***Education***

Ph.D., (Public Finance), New York University, 2010  
M. Phil., (Public Finance), New York University, 2006  
M.P.P., (Public Policy Analysis), University of Chicago, 2000  
B.A., (Economics), Colgate University, 1997

***Professional  
Affiliations***

Member, American Economic Association  
Member, Association of Public Policy Analysis and Management  
Member, Association for Education Finance and Policy